

# Pseudocyphellaria fimbriata

## FAMILY

Peltigeraceae

## AUTHORITY

Pseudocyphellaria fimbriata D.J.Galloway & P.James

## FLORA CATEGORY

Lichen – Native

## ENDEMIC TAXON

Yes

## STRUCTURAL CLASS

Lichens - Foliose

## CURRENT CONSERVATION STATUS

2018 | Not Threatened

## BRIEF DESCRIPTION

Characterised by linear-elongate, complexly dissected lobes with markedly phyllidiate margins; phyllidia with glistening white marginal hairs; a coriaceous, minutely scabrid-areolate upper surface; a white medulla; a green photobiont; a pale red-brown to dark-brown velvety tomentose lower surface with numerous, prominent white pseudocyphellae; and a two-hopane chemistry.

## DISTRIBUTION

**North Island:** Gisborne (Mt Hikurangi), Taranaki (Mt Taranaki), Wellington (Waipakahi Valley, Kaimanawa Range, Ruahine Range. **South Island:** Nelson to Fiordland. Close to or west of the Main Divide and on the east coast from Banks Peninsula to Invercargill, s.l. to 1,500 m.

## HABITAT

Mainly a rainforest species, constantly found in areas of high rainfall but with spasmodic occurrences in drier areas. In the northern part of its range it occurs on exposed rocks in alpine scrub, but elsewhere grows on mossy stumps and most commonly on tree trunks in beech forest and especially at or near forest margins. It may be parasitised by the lichenicolous fungus *Arthonia santessoniana*.

## DETAILED DESCRIPTION

**Thallus** rather loosely attached, orbicular to spreading, to 25 cm diam. **Lobes** dissected, irregularly elongate-laciniate, branching subdichotomous to irregular or subimbricate, margins irregular, lacerate-denticulate, white-pubescent, subsaccate,  $\pm$  copiously phyllidiate. **Upper surface** bright lettuce-green when wet, yellowish-grey or olivaceous or brownish or reddish when dry, smooth, coriaceous to somewhat scabrid-areolate, even or weakly undulate, without soredia, maculae or pseudocyphellae. **Phyllidia** mainly marginal occasionally laminal,  $\pm$  palmately divided, flattened, dorsiventral, upper surface as in main lobes,  $\pm$  finely white-pubescent, especially at apices. **Medulla** white, 350  $\mu$ m thick, rather loose. **Photobiont** green, 10-13.5  $\mu$ m diam., in a rather irregular layer, 100-150  $\mu$ m thick. **Apothecia** rather sparse, sessile, marginal or submarginal, often associated with phyllidia, to 6 mm diam., disc red-brown to dark brown, smooth, matt, epruinose, with a thick, persistent, raised, crenulate-scabrid margin, thalline exciple massive, verucose-areolate, red-brown. **Ascospores** 1-septate, brown, fusiform-ellipsoid, 20-25  $\times$  8-11  $\mu$ m.

**Chemistry:** 7 $\beta$ -acetoxyhopane-22-ol, hopane-7 $\beta$ , 22-diol (tr.), hopane-15 $\alpha$ ,22-diol.

## SIMILAR TAXA

It is distinguished from *P. coriacea* by the marginal phyllidia and from *P. fimbriatoides* by the green photobiont and rather broader spores.



Corticolous in silver beech cloud forest, Waikaremoana Hawke's Bay. Photographer: Marley Ford, Date taken: 29/04/2022, Licence: CC BY.



Corticolous in silver beech cloud forest, Waikaremoana Hawke's Bay. Photographer: Marley Ford, Date taken: 29/04/2022, Licence: CC BY.

## **SUBSTRATE**

Corticolous

## **ATTRIBUTION**

Fact sheet prepared by Marley Ford (1 May 2022). Brief description, Distribution, Habitat, and Features sections copied from Galloway (1985) & Galloway (2007).

## **REFERENCES AND FURTHER READING**

Galloway D.J. 1985: *Flora of New Zealand: Lichens*. Wellington: PD Hasselberg, Government Printer. 662 pp.  
Galloway D.J. 2007: *Flora of New Zealand: Lichens, including lichen-forming and lichenicolous fungi*. 2nd edition. Lincoln, Manaaki Whenua Press. 2261 pp.

## **MORE INFORMATION**

<https://www.nzpcn.org.nz/flora/species/pseudocyphellaria-fimbriata/>